This Week in SP211:1151 Homework, etc.

for the week of 27 August

Homework must be submitted stapled in single day assignment groupings   .

Always attempt to complete the readings before class. You are responsible for reading 10 pages past the current lecture. You may not understand the material completely, but you must read it prior to lecture.

Problems to submit on the date listed:

Week of 27 Aug

Monday :	submit 2: Q1,Q8, 5,14,27
Tuesday:	complete prelab, printwriteup
Thursday:	A4, 2: 44,50,55
Friday:	A5, 2: 74,89, 3: 12

Hints

Auxiliary Problems

A4   Make a motion diagram for a ball thrown straight upward. That is: Draw a 'vertical' line. Mark the origin. Mark a point on the line that represents the position of the ball at each half second. To sinplifiy the numbers assume the ball starts at y = 0 with an initial velocity of 25 $^m/_s$ upward. Also let g = $10^m/_s2$. Plot the upward points just to the left of the line and the downward points just to the right of the line. Draw arrows that represent the displacement during the interval 0-1s and for 1-2s. Use these to estimate the velocity for t = 0.5 s and for t = 1.5 s. Use those to estimate the acceleration at t = 1s. Repeat for the intervals 3-4s and 4-5s. .... Estimate the acceleration at t = 4s. Acceleration is a vector. Please specify a direction. Repeat for the intervals 1.5-2.5 s and 2.5-3.5s. Carry out the steps to estimate the acceleration at t = 2.5 seconds. Where is the ball at t = 2.5 s ? What can be said about the acceleration during the entire flight of the ball ? See Example 2-16.

A5.   Solve equarion 2-12a for t (time). Substitute the result into equation 2-12b and simplifiy to yield 2-12c. The average velocity is $(x-x_o)/t$. Start in 2-12b and form $(x-x_o)/t$. Write v_o as $^v o/_2 + ^v o/_2$. Then use 2-12a to show that 2-12d follows.